

SOLVENT-MODIFIED RESIN SYSTEM CONTAINING FILLER
THAT HAS HIGH T_g, TRANSPARENCY AND
GOOD RELIABILITY IN WAFER LEVEL UNDERFILL APPLICATIONS

ABSTRACT

[0056] A solvent modified resin underfill material comprising a resin in combination with a filler of functionalized colloidal silica and solvent to form a transparent B-stage resin composition, which may then be cured to form a low CTE, high T_g thermoset resin. Embodiments of the disclosure include use as a wafer level filler, and an encapsulant for electronic chips.